

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:

DALE AND CHRISTINE MCQUEARY
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BELGRADE, MT 59714

DAKOTA AND KARI HAM
121 SHEPLERS WAY
BELGRADE, MT 59714

JEREMY SINNEMA
25 SHEPLERS WAY
BELGRADE, MT 59714

TERRILL SINNEMA
3185 W CEDAR MEADOWS
MANHATTAN, MT 59741

RONALD ADAMS AND NICOLE BATES
179 SHEPLERS WAY
BELGRADE, MT 59714

HENESH LIVING TRUST
5530 BURNT RD
BELGRADE, MT 59714

2. Type of action: PRELIMINARY DETERMINATION TO GRANT APPLICATION TO CHANGE WATER RIGHT NO. 41H 30153809.
3. Water source name: Ridgely Creek
4. Location affected by project: Water Right Claim No. 41H 139101-00 has a point of diversion of SESENE Section 18 Township 1 North, Range 4 East, Gallatin County, and a place of use in NWNE and NENE Section 18, Township 1 North, Range 4 East, Gallatin County. Water Right Claim No. 41H 139102-00 has a point of diversion of SESENE Section 18 Township 1 North, Range 4 East, Gallatin County, and a place of

use in NWNE and NENE Section 18, Township 1 North, Range 4 East, Gallatin County. The place of use is approximately 2.5 miles east of Manhattan.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: Applicant proposes to add three points of diversion to Water Right Nos. 41H 139101-00 and 41H 139102-00. The three proposed points of diversion are moveable pumps: two in SWNE Section 18, T1N R4E, Gallatin County and one in NWNWNE Section 18, T1N R4E, Gallatin County. The historical point of diversion and ditch will remain on the water rights to serve the Unchanged Acres. No changes to historic place of use, purpose, place of storage, period of diversion, or period of use are proposed. The proposed points of diversion are 2074 feet, 2443 feet, and 4062 feet downstream of the historic point of diversion. The method of irrigation will change to sprinklers, but all irrigated acres remain in the historic place of use. The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.



Figure 1. Proposed Use Map

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)
- Montana Department of Fish, Wildlife & Parks (FWP) – Dewatered Streams
https://gis-mtftp.opendata.arcgis.com/datasets/e0849312c41b415992a075f8696164c8_0/explore?location=46.751212%2C-110.425168%2C7.85
 - Montana Department of Environmental Quality (DEQ) – Clean Water Act Information Center (CWAIC)
<https://clean-water-act-information-center-mtdeq.hub.arcgis.com/>
 - Montana National Heritage Program (MTNHP) – Natural Heritage Map Viewer
<https://mtnhp.org/mapviewer/?t=7>
 - U.S. Fish & Wildlife Service (USFWS) – National Wetlands Inventory Wetlands Mapper
<https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper>
 - Gallatin County Department of Planning and Community Development – Gallatin County Growth Policy, “Envision Gallatin: Tomorrow Together”, Adopted September 21, 2021.
<https://gallatincomt.virtualltownhall.net/sites/g/files/vyhlif606/f/pages/growth-policy-final-full-document-9.1.21.pdf>
 - Natural Resource Conservation Service (NRCS) – Web Soil Survey (WSS)
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by FWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: No significant impact identified.

A 3/1/2023 search of FWP Dewatered Streams data shows Ridgely Creek is not listed as chronically or periodically dewatered. The proposed use will not increase water consumed or diverted from the source and return flows will remain unchanged. The proposed use will not alter water quantity in the source and the source is not dewatered.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: No significant impact identified.

Ridgely Creek was found to be not assessed in a 3/1/2023 search of DEQ Impaired Waters 2020 data on the CWAIC. The proposed use is not likely to affect water quality because the historic consumptive volume, diverted volume, and return flows remain unchanged.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: No significant impact identified.

The proposed use does not involve a groundwater component.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: No significant impact identified.

Proposed use involves installation of three moveable pumps and sprinkler irrigation infrastructure. The moveable pumps will not be a barrier to flow and are not expected to modify flow regimes. Installation of the moveable pumps involves a small scale and temporary disturbance to the riparian areas. Construction of sprinkler irrigation infrastructure will entail a small scale and temporary disturbance to land that has been historically irrigated for decades.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: No significant impact identified.

A search of the MTNHP Natural Heritage Map Viewer on March 1, 2023, for the Township 1 North, Range 4 East, returned the following results.

- Zero Plant Species of Concern, Potential Species of Concern, or Special Status Species
- Two Animal Potential Species of Concern: Hooded Merganser and Rufous Hummingbird
- Ten Animal Species of Concern: American White Pelican, Brewer's Sparrow, Cassin's Finch, Ferruginous Hawk, Golden Eagle, Great Blue Heron, Loggerhead Shrike, Long-Billed Curlew, Northern Goshawk, and Trumpeter Swan
- One Animal Special Status Species: Bald Eagle

The proposed project will not impact any "species of special concern" or threatened or endangered fish, wildlife, plants, or aquatic species. Water diverted and consumed will remain unchanged from historic values. The proposed pumps are small pumps that will not create a barrier to the migration or movement of aquatic species. Water will remain in Ridgely Creek for longer before it is diverted.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No significant impact identified.

A search of the National Wetlands Inventory Mapper on 3/1/2023 showed freshwater emergent wetlands in the place of use. Freshwater emergent wetlands were shown to overlap with portions of the Beck Ditch as it crosses through the historic place of use. The Beck Ditch is not used for the historic place of use and is not part of this change application. The wetlands along Beck Ditch will be unaffected by the proposed project. Freshwater emergent wetlands run along Ridgely Creek and in low lying areas near the creek. The proposed project will not divert or consume more water than historic values. Water will remain in Ridgely Creek for longer before it is diverted by the pumps.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: No significant impact identified.

There is a small pond in the historic place of use. The pond is not covered under the water rights being changed and therefore there are no ponds involved in this change.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: No significant impact identified.

According to a search of the NRCS WSS on 11/7/2022, there is surface salinization risk in the project area. Approximately one-quarter of place of use has a high surface salinization risk or is already saline. Approximately one-half of place of use has surface salinization risk and one-quarter of place of use has low surface salinization risk. The project is not predicted to increase soil salinization risk. The historic place of use will remain unchanged from historic practices. No new areas will be prone to surface salinization. The irrigation method will change from flood irrigation to sprinkler irrigation. Sprinkler irrigation may have a lower risk of surface salinization than flood irrigation. Installation of three moveable pumps and sprinkler infrastructure may cause disturbance to the soil, but the soil disturbance would be minor and temporary.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: No significant impact identified.

The disturbance associated with installing three moveable pumps and sprinkler infrastructure should be minimal and should not promote the establishment of noxious weeds. Under Montana law, private landowners are responsible for noxious weed control on their property.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No significant impact identified.

The proposed project will not impact air quality.

HISTORICAL AND ARCHEOLOGICAL SITES - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.

Determination: No significant impact identified.

The proposed project is not located on State or Federal lands. The Applicant did not mention significant historical or archeological sites on the property.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: No significant impact identified.

No impacts on environmental resources of land, water and energy not already addressed.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: No significant impact identified.

The proposed change is for the purpose of irrigation. Agricultural irrigation is consistent with the 2021 Gallatin County Growth Policy.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: No significant impact identified.

The proposed change is located entirely on private property and will not affect access to recreational activities or the quality of recreational and wilderness activities.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: No significant impact identified.

The proposed changes will not impact human health.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No significant impact identified.

The proposed project does not impact government regulation on private property rights.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact identified.
- (b) Local and state tax base and tax revenues? No significant impact identified.
- (c) Existing land uses? No significant impact identified.
- (d) Quantity and distribution of employment? No significant impact identified.
- (e) Distribution and density of population and housing? No significant impact identified.
- (f) Demands for government services? No significant impact identified.
- (g) Industrial and commercial activity? No significant impact identified.
- (h) Utilities? No significant impact identified.
- (i) Transportation? No significant impact identified.
- (j) Safety? No significant impact identified.
- (k) Other appropriate social and economic circumstances? No significant impact identified.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts No secondary impacts have been identified.

Cumulative Impacts No secondary impacts have been identified.

3. *Describe any mitigation/stipulation measures:* The proposed pumps and historic point of diversion will be operated at a specified maximum flow rate and volume to prevent expansion beyond historic practices.

4. **Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:** The “no action” alternative would be to continue using the historic point of diversion to divert water and the historic ditch to convey water to the place of use. The historic point of diversion was moved by a neighbor and cannot deliver water efficiently without renovations, so the Applicant would be left with no water or pricey renovations.

PART III. Conclusion

1. **Preferred Alternative:** The preferred alternative is to grant the change application if the Applicant has proven the criteria of §85-2-402, MCA.

2. **Comments and Responses:** None at this time.

3. **Finding:**
Yes___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: The EA is the appropriate level of analysis because the proposed project is to add three points of diversion for irrigation. Crop irrigation is a locally accepted practice, and no significant impacts are anticipated. None of the identified impacts for any of the alternatives are significant as defined in ARM 36.2.254.

Name of person(s) responsible for preparation of EA:

Name: Shannon Baumgardner

Title: Hydrologist/Water Resource Specialist

Date: March 7, 2023